REMARKS

Claim 1 has been cancelled herein, and claims 51-96 have been added. The specification as filed fully supports new claims 51-96. Thus, no new matter has been added. Applicant asks that claims 51-96 be examined. Enclosed is a check for excess claim fees. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: September 17, 2001

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Version with markings to show changes made

In the specification

The paragraph beginning at page 1, line 5 has been amended as follows:

This application is a continuation of U.S. Application Serial No. 09/177,273, filed October 22, 1998. In addition, this [This] application claims priority from U.S. Application Serial No. 09/177,273, filed October 22, 1998, U.S. Provisional Patent Application Serial No. 60/062,709, filed October 22, 1997, U.S. Provisional Patent Application Serial No. 60/063,414, filed October 28, 1997, U.S. Provisional Patent Application Serial No. 60/063,418, filed October 28, 1997, U.S. Provisional Patent Application Serial No. 60/083,272, filed April 28, 1998 and U.S. Provisional Patent Application Serial No. 60/086,397, filed May 22,1998.

In the claims

Claim 1 has been cancelled without prejudice.

Claims 51-96 have been added as follows.

--51. A method for treating a mammal having non-invasive fungus-induced rhinosinusitis comprising the presence of allergic mucus, said method comprising directly mucoadministering to at least a portion of the nasal-paranasal anatomy of said mammal a formulation in an amount, at a frequency, and for a duration effective to reduce or eliminate said non-invasive fungus-induced rhinosinusitis, said formulation comprising an antifungal agent.

52. The method of claim 51, wherein said mammal is a human.

53. The method of claim 51, wherein said mammal is nonatopic.

54. The method of claim 51, wherein said mammal is immunocompetent.

55. The method of claim 51, wherein said non-invasive fungus-induced rhinosinusitis comprises polyp formation or polypoid change.

56. The method of claim 51, wherein said non-invasive fungus-induced rhinosinusitis is chronic.

57. The method of claim 51, wherein said formulation is in a liquid or aerosol form.

58. The method of claim 51, wherein said formulation is in a solid or aerosol form.

59. The method of claim 51, wherein said direct mucoadministration comprises irrigating said nasal-paranasal anatomy with a liquid form of said formulation.

60. The method of claim 51, wherein said direct mucoadministration comprises applying an aerosol form of said formulation to said nasal-paranasal anatomy.

61. The method of claim 51, wherein said direct mucoadministration comprises applying a powder form of said formulation to said nasal-paranasal anatomy.

62. The method of claim 51, wherein said antifungal agent comprises a macrolide.

63. The method of claim 51, wherein said antifungal agent comprises an azole.

64. The method of claim 51, wherein said antifungal agent interpolates fungal cell wall components.

65. The method of claim 51, wherein said antifungal agent comprises a sterol inhibitor.

66. The method of claim 51, wherein said antifungal agent comprises an antifungal agent selected from the group consisting of amphotericin B, ketoconazole, itraconazole, saperconazole,

voriconazole, flucytosine, miconazole, fluconazole, griseofulvin, clotrimazole, econazole, terconazole, butoconazole, oxiconazole, sulconazole, ciclopirox olamine, haloprogin, tolnaftate, naftifine, terbinafine hydrochloride, morpholines, nystatin, natamycin, butenafine, undecylenic acid, Whitefield's ointment, propionic acid, and caprylic acid.

67. The method of claim 51, wherein said antifungal agent comprises an antifungal agent selected from the group consisting of amphotericin B, ketoconazole, itraconazole, saperconazole, and voriconazole.

68. The method of claim 51, wherein said antifungal agent comprises amphotericin B.

69. The method of claim 51, wherein said antifungal agent comprises itraconazole.

70. The method of claim 51, wherein said formulation comprises a pharmaceutically acceptable aqueous vehicle.

71. The method of claim 70, wherein said formulation comprises about 0.01 ng to about 1000 mg of said antifungal agent per liter.

72. The method of claim 71, wherein said effective amount comprises about 0.01 mL to about 1 L of said formulation per nostril of said mammal.

73. The method of claim 71, wherein said effective amount comprises about 5 mL to about 100 mL of said formulation per nostril of said mammal.

74. The method of claim 71, wherein said effective amount comprises about 20 mL of said formulation per nostril of said mammal.

75. The method of claim 70, wherein said formulation comprises about 1 ng to about 500 mg of said antifungal agent per liter.

76. The method of claim 70, wherein said formulation comprises about 100 mg of said antifungal agent per liter.

77. The method of claim 51, wherein said formulation comprises a plurality of antifungal agents.

78. The method of claim 51, wherein said effective amount of said formulation comprises about 0.01 ng to about 1000 mg of said antifungal agent per kg of body weight of said mammal.

79. The method of claim 51, wherein said effective amount of said formulation comprises about 1 ng to about 500 mg of said antifungal agent per kg of body weight of said mammal.

80. The method of claim 51, wherein said effective amount of said formulation remains constant during said effective duration.

81. The method of claim 51, wherein said effective frequency of said direct mucoadministration is from about four times a day to about once every other week.

82. The method of claim 51, wherein said effective frequency of said direct mucoadministration is from about twice a day to about once a week.

83. The method of claim 51, wherein said effective frequency of said direct mucoadministration is more frequent than once a day.

84. The method of claim 51, wherein said effective frequency of said direct mucoadministration is more frequent than once a week.

85. The method of claim 51, wherein said effective duration is greater than about 7 days.

86. The method of claim 51, wherein said effective duration is greater than about 14 days.

87. The method of claim 51, wherein said effective duration is greater than about 30 days.

88. The method of claim 51, wherein said effective duration is greater than about 60 days.

89. The method of claim 51, wherein said effective duration is greater than about 90 days.

90. The method of claim 51, wherein said formulation further comprises a compound selected from the group consisting of pharmaceutically acceptable aqueous vehicles, pharmaceutically acceptable solid vehicles, mucolytic agents, antibacterial agents, anti-inflammatory agents, immunosuppressants, dilators, vaso-constrictors, and steroids.

91. The method of claim 51, wherein said method further comprises administering to said mammal a second formulation, said second formulation comprising a compound selected from the group consisting of antifungal agents, pharmaceutically acceptable aqueous vehicles, pharmaceutically acceptable solid vehicles, mucolytic agents, antibacterial agents, anti-inflammatory agents, immunosuppressants, dilators, vaso-constrictors, and steroids.

92. The method of claim 51, said method comprising, after said direct mucoadministration, prophylactically mucoadministering to said mammal a prophylactic formulation in an amount, at a frequency, and for a duration effective to prevent said non-invasive fungus-induced rhinosinusitis, said prophylactic formulation comprising an antifungal agent.

93. The method of claim 92, wherein said prophylactic mucoadministration comprises direct mucoadministration.

94. The method of claim 51, wherein said mucoadministration begins during a period noncoincident with an intraoperative period, said intraoperative period being the time during a nasal surgery.

95. The method of claim 94, wherein said mammal had a nasal surgery before said mucoadministration.

96. The method of claim 94, wherein said mammal was nasal surgery-free before said mucoadministration.--